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The Effect of Mortality Salience and Collaborative Experience on Aggression of "Third-Party Victims"

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The purpose of the present study was to examine effects of collaborative experience and mortality salience on aggression in a group situation. Forty-eight participants were randomly assigned into one of four conditions across 2 (mortality: salient vs. not salient) × 2 (collaborative experience vs. no experience) factorial design. Participants in the mortality salient condition watched a video film depicting death and wrote down how they felt, while those of the not salient condition did not. Participants in the collaborative condition collaboratatively completed puzzle tasks with 2 other participants (one of them was a confederate). Participants in the not collaborative condition did it for themselves. After the task, all the participants observed the confederate being harmed by a member of other group, then the participants were given opportunity to retaliate against the harm-doer. They were asked to evaluate 5 pictures drawn by the harm-doer. Their evaluations were accompanied by different levels of uncomfortable noises. The measure of aggression was the intensity of noises that the participants delivered against the harm-doer. Participants further answered to a questionnaire to measure aggressive intents, hostility, and perception of threat. Results showed that mortality salience increased aggression and aggressive intents, but contrary to hypotheses, collaborative experience decreased aggression. It was interpreted the existential fear could affect intergroup aggression.

Key words: Third-Party Victims, mortality salience, collaborative experience, aggression

Introduction

As in "a spiral of violence," we frequently see conflicts is escalate and extend their scope. From international warfare to interpersonal conflicts, we also see cases in which a third party intervenes into the events. One type of third party intervention is that which is requested by participants, such as divorce meditation in family court, and another type is the spontaneous intervention by a third party, as in settling a quarrel. Third party intervention may succeed in settling conflicts if it appeases the participants or makes offer to fit their interests. But one of the most frequent patterns of conflict escalation is that others who did not suffer damage come into the conflict and thereby increase the number of participant increases.

One such example is when a third party group decides to intervene in an inter-group conflict, not for economic reasons such as social class or disparity in wealth, but for the purpose of supporting people who belong to the same group. Further, in actions of the United Nations, we

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can find cases in which third party intervention based on goodwill caused serious problems. The United Nations has intervened to end civil wars and to save refugees, but its action sometimes has intensified the conflicts and increased the number of refugees (e.g., Ignatieff, 1998). As such, case studies have found that spontaneous intervention sometimes escalates conflicts. This type of conflict escalation occurs both in international as well as interpersonal levels, and it causes serious damage to social relationships at each level. Therefore, it is crucial to investigate the psychological mechanism of conflict escalation by third party intervention.

In this study, we call this type of aggressive behavior as "third party aggression." This is defined as "aggression against a harm-doer engaged by individuals who do not suffer any harm. Seeing in-group members suffering damage may trigger the third party aggression. A potent motive for aggressive response to harm is retaliation (Baron & Richardson, 1994; Tedeschi & Felson, 1994). Retaliation is the act of causing a harm-doer the same amount of physical or psychological harm as one has suffered. It has been regarded as an attempt to retrieve fairness that was impaired by unjust harm or to prevent further harm (Dengerick & Covey, 1983; Ohbuchi, 1996; Tyler, Boeckmann, Smith & Huo, 1997). Retaliatory aggression is sometimes engaged by persons other than the victims. After the September 11th terrorist attacks, the American people supported U.S. military action against Afghanistan, even though most of them did not personally suffer from the tragedy. What caused their strong retaliatory motivation? We assume that the American people perceived the event was an attack on their society, even though they were not personally attacked.

However, the group process seems to activate other motives of aggression other than retaliation. For example, there is considerable evidence that an individual shapes positive attitudes toward other in-group members only if he/she belongs to the same group. The in-group favoriticism (Tajfel, 1970) suggests that people devaluate out-group members because they want to enhance the status of their own group, not because of retaliatory motivation. The social identity theory by Tajfel and others (Tajfel, 1982; Turner, 1987; Hogg & Abrams, 1988) postulates that an individual reacts aggressively when he/she observes that his/her in-group members are harmed. Psychological variables mediating this aggressive reaction are group identification and social identity. Since a social group is a source of identity for individual members, an attack against their group is perceived as a threat to their identities. This may be a reason why those who are not personally harmed become aggressive, as seen in third party's aggressive intervention into conflicts.

In a laboratory experiment, Kumagai and Ohbuchi (2003) examined factors of the third party aggression and found that the salience of group membership and the cooperative experience prompted this type of aggression. The effects of cooperative experience were mediated by the perception of threat and aggressive intent, that is, the participants who had cooperative experiences with the victim perceived the attack against the victim as more threatening to themselves and more strongly wanted to retaliate against the harm-doer than those who had not. These results demonstrated empirical evidence for the third party aggression, suggesting that the perception of threat depended on group membership.

In the present study, we focused on another cognitive factor of the perception of threat. It is

the salience of human mortality. Terror management theory (Greenberg, Pyszczynski & Solomon, 1986; Solomon, Greenberg & Pyszczynski, 1991) postulates that individuals who experience mortality salient feel an existential anxiety and they attempt to cope with it by firmly re-establishing their self (Pyszczynski, Solomon & Greenberg, 2002). An empirical finding that the mortality salience increases in-group bias (Harmon-Jones, Greenberg, Solomon & Simon, 1996; Castano, Yzerbyt, Paladino & Sacchi, 2002) has been interpreted by the researchers that in-group bias is a psychological manoeuvre to defend self from existential anxiety by enhancing the status of in-group.

Activation of the in-group bias by mortality salience has been found in religious groups (Greenberg, Pyszczynski, Solomon, Rosenblatt, Veeder, Kirkland & Lyon, 1990), business companies (Nelson, Moore, Olivetti & Scott, 1997), sports teams (Dechene, Greenberg, Arndt & Schimel, 2000), gender, and ethnic groups (Arndt, Greenberg, Schimel, Pyszczynski & Solomon, 2002). Further, McGregor, Lieberman, Greenberg, Solomon, Arndt & Simon (1998) found that participants who were criticized of their political position became more aggressive when mortality was salient. This suggests that people become sensitive to threat or attack to their group identity particularly when mortality is salient because they are strongly concerned with group identity in this situation. Based on above discussion, we made the following prediction regarding the third party aggression. Participants who felt mortality salience would be more likely to engage in the third party aggression than those who did not have that feeling (*Hypothesis 1*).

As a variable moderating the relationship between an existential anxiety evoked by the mortality salience and third party aggression, we assumed group cohesiveness, that is, positive affect or attachment that group members have to their own group (Hogg, 1992). It has been found that members of a strongly coherent group tend to react aggressively to insult by out-group members (Hogg, 1992). Since members of cohesive group strongly commit to their group, they may be very sensitive to negative evaluations against their group. Group cohesiveness may be enhanced by a number of social factors. Among them, Turner (1987) suggested that members' interdependency with other members and collaborative strivings toward a shared goal strengthen the bonding between them, group membership, and attachment with the group and other members. Therefore, we assumed that members of a cohesive group become especially sensitive to a negative evaluation to the group under mortality salience. Based on this assumption, we made the second prediction: Participants who felt mortality salience will be likely to engage in the third party aggression when they belonged to a highly cohesive group than those who belonged to a less cohesive group (*Hypothesis 2a*).

However, there seems to be a possibility that group cohesiveness exerts an inhibitory effect on third party aggression. Among those who are accepted by other members in a cohesive group, an existential anxiety might be not strongly evoked by mortality salience. This is implied by a research finding that individuals who had a secure attachment style were less affected by mortality salience than who did not (Florian & Mikulincer, 1998; Mikulincer & Florian, 2000; Pyszczynski et al., 2002; Taubman-Ben-Ari, Findler & Mikulincer, 2002). Based on the above discussion, we made the third prediction: Participants who felt mortality salience would be less likely to engage in the third party aggression when they belonged to a highly cohesive group than those who

belonged to a less cohesive group (*Hypothesis 2b*).

The purpose of the present study was to examine these hypotheses regarding the relationships of mortality salience, group cohesiveness, and third party aggression in a laboratory experiment.

Method

Participants and experimental conditions

Forty-eight students of a large public university in Japan (30 men and 18 women) were recruited from a psychology class to participate in the experiment. They were given a 500-yen book coupon as reward. They were randomly assigned into one of four conditions (each $N = 12$) across 2 levels of mortality (mortality salient vs. mortality not salient) x 2 levels of cohesiveness (collaborative group experience vs. no experience).

Procedures

The experiment consisted three sessions. When participants arrived at the laboratory, the experimenter explained the ostensible purpose of the experiment as a study of imagination. Then, the experimenter explained that they would conduct three sessions: the measurement of imagination about a particular situation, the effect on imagination under the condition in which a person is observed and the effects of stress on imagination. It was explained to all participants that they take part in these sessions with two other participants as a group. Actually, one of them was a confederate. The experimenter told the participants that there was another group of participants in a different room, and they would communicate with the members of the other groups in the third session.

Manipulation of mortality salience. The first session was a manipulation of mortality salient. The participants in the mortality salience condition were asked to watch a 6-minite video film depicting death on 15-inch PC display in each cubicle. The film consisted of Holocaust in Poland in World War II, in which many people were shot, burned, and buried. After watching the film, the experimenter asked the participants to answer an open-ended question, "Please imagine that you are in the same situation as you have seen in the film. Write down your thoughts or how you would behave in that situation." In the non-salient condition, the participants neither saw the film nor were given the question.

Cooperative experience. After that, the participants were engaged in an imagination puzzle task as the second session. They were required to construct objects (animal, building, and vehicle) by assembling geometric blocks as soon as possible. To heighten tension in the second session, the experimenter explained to all participants that the professionals who were waiting in another room would evaluate the participant's level of imagination in their works. In the collaborative experience condition, the participants were asked to complete the task in collaboration with other participants. In order to manipulate collaborative experience, the experimenter made the rule that each participant in collaborative experience condition could only use and touch their own pieces, so they could not accomplish the task alone. In the non collaborative experience condition, the participants were asked to complete the task for themselves.

Stress session. The third task was a picture completion test. The participants were requested

to draw five pictures (e.g., objects, figures, landscapes, etc) including given simple shapes (e.g., "Y"). Emphasizing that the purpose of this session was to examine the effect of stress on imagination, the experimenter explained that the participants would exchange the pictures with the other group and evaluate each other. In all conditions, the experimenter asked one of the three participants (the confederate was always asked) to draw pictures, and explained that their pictures would be evaluated by a member of the other group. Two other participants were asked to see that the other participant (confederate) conducted the task, so no true participant drew pictures and all confederates drew same pictures in each time.

Observation of the victim being harmed. After the confederate completed the five pictures, the experimenter carried the pictures to the other group. Then, the participants observed the confederate being harmed by the other group in the evaluation of the pictures. For the evaluation, a personal computer was used. On its display, there were 9 evaluation buttons labeled "1 (Extremely creative)" through "9 (Not creative at all)." The experimenter explained that these evaluation buttons were connected to different levels of discomfort noises; that is, the poorer evaluation, the louder the noise the writer would receive. The volume levels of noises were 40db (Level 1) through 80db (Level 9), increasing 5db across levels. The participants were given the 3, 5, 7, and 9 levels as samples through a headphone.

Figure 1 shows the layout of the experimental room. The confederate who had drawn the pictures sat in the middle of the table wearing a headphone. A computer display was put on the table, so the participants could see which levels of evaluations and noises the confederate received. In every condition, the participants observed that the confederate received five poor evaluations (loud noises at the levels of "7", "9", "7", "8" and "9").

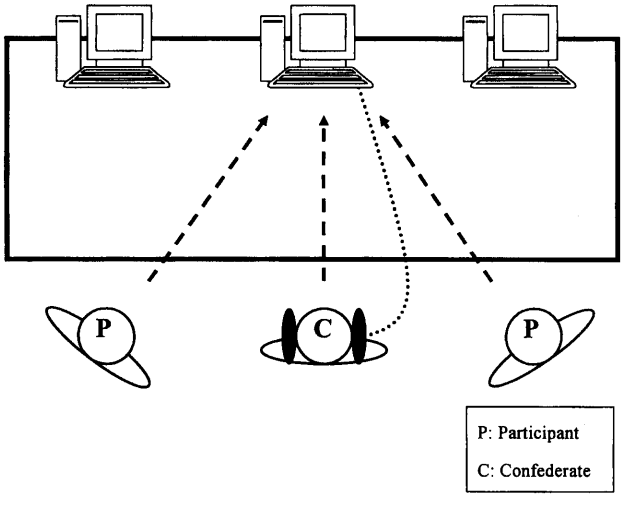

Figure 1. Observation of the victim being harmed. Two participants were asked to observe the confederate receiving evaluation.

Measurement of aggression. The experimenter then gave each participant five pictures that were drawn by a member of the other group and asked him/her to evaluate them using the personal computer. The experimenter instructed participants to click one of the nine evaluation buttons for each picture, and explained that the member of the other group would continue to hear the noise for six seconds. The measurement of aggression consisted of the noise intensity that each participant chose for each picture. In the measurement, partitions were placed between the participants and confederates so that they could not see each other (Figure 2).

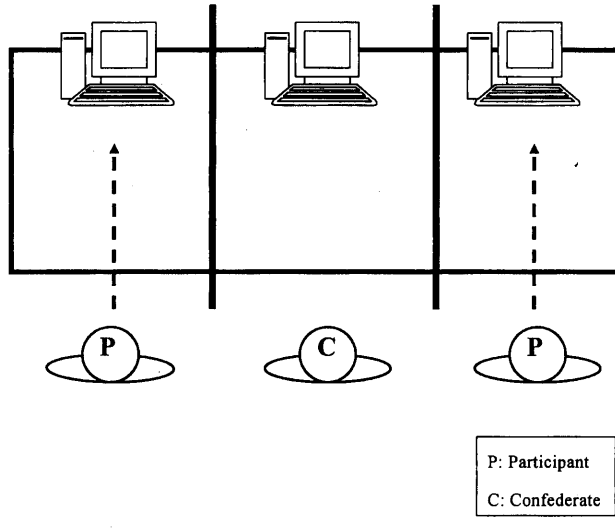

Figure 2. Measurement of aggression. Partitions were placed between the participants and confederate so that they could not see each other's evaluation.

Measurement of the mediating variables. After the evaluation task, each participant was asked to answer a series of questions using a personal computer. A question, "When you observed the person next to you receiving noises from the other group, how strongly did you feel your pride to be damaged?" was to measure the perception of threat. Another question to measure aggressive intent was "When you gave noises to a member of the other group, how strong were your intentions to cause the person pain?" was to measure the aggressive intent. For each of these questions, the participants made a rating on a 7-point scale ranging from 1 (*Not at all*) to 7 (*Definitely*).

Debriefing. After the experiment, the experimenter debriefed each participant of the true purpose of the experiment, hypotheses, experimental design, and procedures. The experimenter especially explained that there were neither professionals nor other groups, and therefore, the participants did not harm anyone.

Results

Aggressive behavior

We examined the mean scores of intensity of noise that the participants gave to the member of the other group by two-way *ANOVA* with a design of mortality (2) x collaborative experience (2). A main effect of mortality was marginally significant, F (1,44) = 3.24, p = .079. The participants in the mortality salient condition tended to select more intense noises (M = 6.45, SD = 1.02) than those in the mortality not salient condition (M = 5.86, SD = 1.31).

Although an interaction between the mortality and the collaborative experience was nonsignificant, F (1,44) = 1.12, $p > .05$, planned comparison were performed to test the effects of mortality salient on the noise intensity separately in the collaborative and non-collaborative experience condition. In the non-collaborative experience condition, only the participants who felt mortality salience selected significantly more intense noises for the member of other group, F (1,44) = 4.09, $p < .05$, as Figure 3 indicates. In the collaborative experience condition, the effect of mortality salience was not significant, F (1,44) = .274, p = .604.

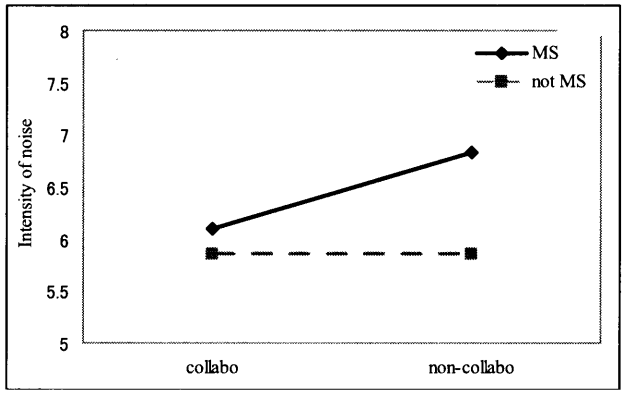

Figure 3. Interaction of mortality and collaboration on noise intensity.

The mediating variables

We also examined the rating of perception of threat and aggressive intent by two-way *ANOVA* using the mortality salience and collaborative experience as independent variables. On the ratings of aggressive intent, the interaction effect of mortality salience x collaborative experience was significant, F (1,44) = 7.42, $p < .01$. As Figure 4 indicates, the participants who experienced group collaboration in the mortality salient condition had weaker aggressive intent than those who did not experience it in the same condition, F (1,44) = 5.88, $p < .05$. In the non-collaborative experience condition, the participants who were made their mortality salient had stronger aggressive intent than those who were not, F (1,44) = 5.21, $p < .05$. On the perception of threat, no effect was significant (Figure 5).

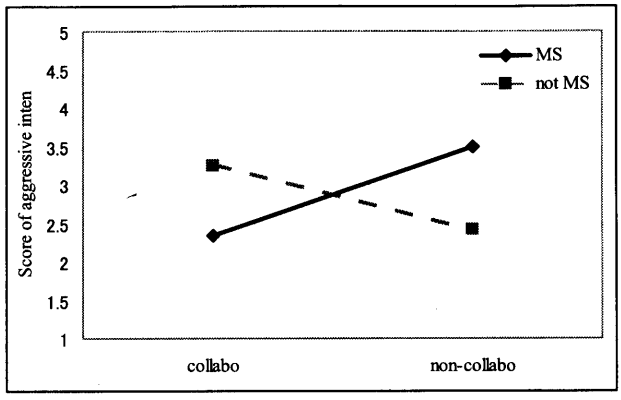

Figure 4. Interaction between mortality and collaboration on the rating of aggressive intent.

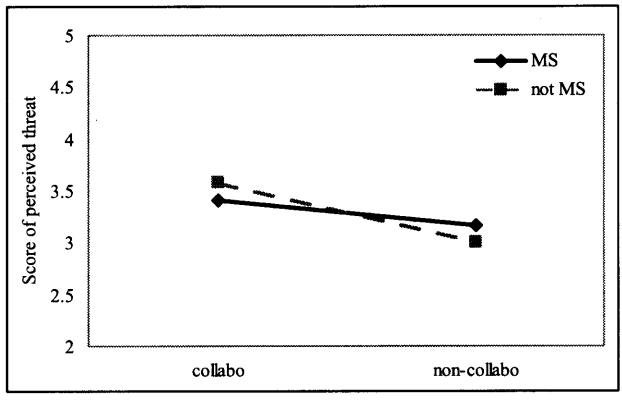

Figure 5. Interaction between mortality and collaboration on the rating of perception of threat.

Discussion

In this study, we experimentally examined what prompted the third party aggression. Specifically we attempted to test the hypotheses regarding effects of the mortality salience and group cohesiveness on this type of aggression. Hypothesis 1 that the mortality salience would enhance third party aggression was partially supported; that is, the participants who were made their mortality salient tended to select more intense noises against the harm-doer than those who were not. We interpreted that the mortality salience evoked the participants' desire to enhance their self-concept, which in turn motivated defensive or retaliatory aggression against the threat to their own group.

Hypothesis 2a predicting that the collaborative experience in a group situation would

engender third party aggression was not supported. When the mortality was made salient, instead, participants who experienced group collaboration were less aggressive than those who did not. This result is consistent with the alternative hypothesis (Hypothesis 2b) predicting that group cohesiveness exerts an inhibitory effect on mortality salience and third party aggression. The same pattern of results was observed on the ratings of the aggressive intent. These results imply that group collaboration increased group cohesiveness, which alleviated an existential anxiety evoked by the mortality salience and lowered aggressive reactions to the threat to their group. We interpreted that group collaboration and group cohesiveness might have generated the feeling of being accepted within the group, which contributed to the re-establishment of their self-concept. Consequently, the present study suggested that group cohesiveness moderated the effects of the mortality salience on third party aggression.

A problem involved in the present study was that we failed to find significant differences in the level of perceived threat between the conditions. The questionnaire measurement might not have been very sensitive to this psychological variable, probably because the psychological processes of third party aggression was not very conscious. This issue should be dealt with in future studies by using different methods. Further, the absence of the perception of threat implies the other processes of third party aggression are instigated when the suffering of the in-group member is seen. In this process, a plausible mediating variable is justice. Research on justice has shown that perceive violation of social norms motivates retaliation to restore justice (Tyler et al., 1997). Therefore, it could be interpreted that the participants in this study did not identify themselves with victims, but they regarded the action of harm-doer as violation of social norm. Then the participants might attempt to inflict punishment for that violation. That could be the reason why the participants became aggressive toward harm-doer without the perception of threat.

The result of this study contributes to the understanding of why civil wars tend to become more aggressive and harder and harder. Today, we can see the conflict escalation in a number of inter-ethnic conflicts such as Catholic vs. Protestant in North Ireland, Catholic vs. Protestant vs. Muslim in Former Yugoslavia, Jewish faith vs. Islamic religion in Israel (Ignatieff, 1993; Volkan, 1997). Most of these inter-ethnic conflicts appear to include serious religious enmity, which may strongly activate the concept of death among participants of both groups. The present finding that mortality salience intensified participants' aggression suggests the mechanism of escalation of conflicts involving religious enmity. At the same time, the present study indicates that the collaborative experience reduced aggression, probably by moderating the salience of mortality. This suggests the other role of religion in inter-ethnic conflicts, that is, coherent religious groups may provide their members with a feeling of being accepted and relieve their hostility against the other groups. The next question to be addressed in the future research is when and how each of these different aspects of religion affects the development inter-group conflicts.

In present study, we examined aggressive behavior by third party who did not personally suffer. Although the results were not perfectly consistent with our hypotheses, they suggest some social psychological processes involving self-concept and inter-group conflict. The present study provided a clue for understanding why conflicts are sometimes escalated by third party intervention.

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